### OFFICE OF THE SELECT BOARD

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# TOWN OF ARLINGTON MASSACHUSETTS 02476-4908

#### **MEMORANDUM**

TO:

Laura Swan, Chair

**Transportation Advisory Committee** 

FROM:

Lauren Costa

Administrative Assistant

DATE:

September 29, 2022

RE:

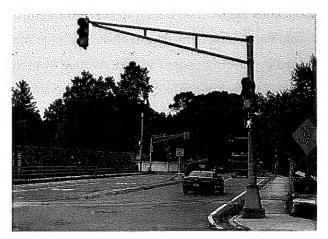
Intersection @ Park Ave and Route 2's Frontage Roads

The Select Board at the meeting of September 28th referred the attached to you for your review and recommendations back to the Board.

Thank you for your attention to this matter.

attachment

cc: Daniel Amstutz, Senior Transportation Planner



Dear Arlington Selectboard,

The intersection of Park Avenue and Route 2's frontage roads has always been one of the most congested in the town. However, in the past few years, maintenance levels have dropped, and dangerous behavior has increased. This is a list of recommendations to be made in accordance with Connect Arlington and best practices.

### Pedestrian phasing:

The signals currently operate with concurrent phases that don't have leading intervals. The walk sign is on for only a few seconds, but ends early while the concurrent green for drivers is active.

#### MassDOT should:

- Install 4 second leading pedestrian intervals for all crosswalks with turning vehicle conflicts, in accordance with <u>Connect Arlington C.4.5.2</u>.
- Maximize all walk phases so that the pedestrian phase reaches 0 as the traffic signal reaches 0.
- Install appropriate No Turn On Red (R10-11 Series) signage as needed.

## Driving and bicycling:

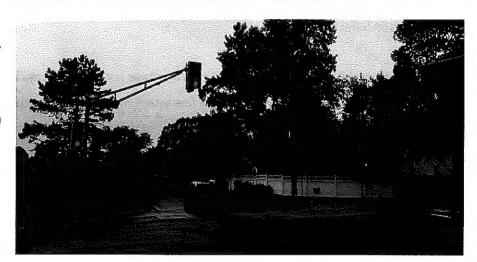
As a driver coming from Park Avenue from Arlington, I am severely disadvantaged because of biased signal timing. Before 2015, the signal would be timed so that drivers from Arlington get 20 seconds more green time than drivers from Belmont, but in recent years that precedent has switched. Currently, drivers on Park Avenue in Belmont get a 45 second green light to enter the

interchange. That is significantly longer than the 25 seconds Arlington drivers get to enter the interchange, but traffic volumes appear to be very similar. This issue should be solved by:

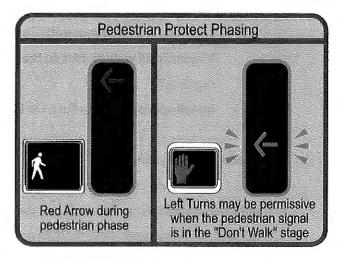
- Eliminating the leading left turn phase for Park Avenue from Belmont onto Route 2.
  - By removing this phase, you can free up 15 extra seconds for a longer phase for Park
     Avenue for both Arlington and Belmont, and reduce the signal cycle.
- Using Time Of Day phasing so that signal phasing patterns can change based on traffic volumes.

Maintenance at these signals is also infrequent. Concord Turnpike's approach on Arlington's side of the interchange has an extremely dangerous situation that could confuse a

driver into thinking
they had a green light,
because of a missing
visor on a Park
Avenue signal, as seen
in the photo to the
right. Furthermore,
outdated "doghouse"
style left turn signals
currently exist at this
location. MassDOT
should:



- Perform maintenance on this signal, to check that it is up to MassDOT standards.
- Install Flashing Yellow Arrow left turn signals to replace older style 5-section signals.
  - Program a pedestrian protect phase, so that if a pedestrian clicks the crosswalk button, left turns are converted to protected only so that pedestrians can cross in a safer manner. (See image on right)



Finally, the pavement markings need to be updated on the bridge and in the immediate vicinity of the intersection, to clarify movements and user expectations. New pavement markings should provide:

- Clearly marked turn and travel lanes.
- Bicycle accommodations, with green paint to highlight shared lane markings, or bicycle lanes through intersections.

Please feel free to contact me with any questions.

Thank you,

Petru Sofio

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